



PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of:

Art Unit: 2503

Vora

Examiner: S. CRANE

Serial No. 08/654,760

Docket No. V&F-001.CPA1

Filed: 5/29/96

For: VERTICALLY INTEGRATED FLASH EEPROM FOR GREATER DENSITY
AND LOWER COST

Honorable Commissioner
of Patents and Trademarks
Washington, D.C. 20231

Morgan Hill, California
December 16, 2002

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TECHNOLOGY CENTER 2800
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FJONES
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SUPPLEMENTARY AMENDMENT

Dear Sir:

In further response to the Office Action mailed 8/1/2002 and in light of the comments of the Examiner at the interview, please amend the above identified case as follows and consider the following new evidence.

IN THE CLAIMS

- 1 1. (Clean) A nonvolatile EPROM or EEPROM memory cell formed using a vertical
- 2 MOS transistor comprising:
- 3 a semiconductor substrate doped to have a first conductivity type so as to act as a
- 4 source region of said nonvolatile memory cell, said first conductivity type being either N-type
- 5 or P-type, and having a top surface which extends laterally and a depth which extends
- 6 vertically;
- 7 a vertical MOS transistor formed by alternating, abutting N-type and P-type doped
- 8 layers in said substrate which have junctions therebetween to form a channel region and a